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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|----------------------------------|-----------------|----------------------|---------------------|-----------------|
| 10/761,180 | 01/20/2004 | Jeffrey A. Hubbell | NOVCEL.3CPDDDVC | 2061 |
| 36647 | 7590 06/28/2005 | | EXAM | INER |
| NOVOCELL, INC. | | | BERMAN, SUSAN W | |
| 31 TECHNOLOGY DRIVE SUITE 100 | | | ART UNIT | PAPER NUMBER |
| IRVINE, CA 92618 | | | 1711 | |
| | | | | |

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) |
|--|---|---|--|
| Office Action Summary | | 10/761,180 | HUBBELL ET AL. |
| | | Examiner | Art Unit |
| | | Susan W. Berman | 1711 |
| Period fo | The MAILING DATE of this communication ap or Reply | pears on the cover sheet with th | ne correspondence address |
| THE I - External exte | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. In sions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reput period for reply is specified above, the maximum statutory period reture to reply within the set or extended period for reply will, by statute the received by the Office later than three months after the mailing the patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply bely within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS fe, cause the application to become ABANDO | e timely filed days will be considered timely, from the mailing date of this communication DNED (35 U.S.C. § 133). |
| Status | | | |
| 1) | Responsive to communication(s) filed on | · | |
| _2a)□ | This action is FINAL. 2b)⊠ Ti | his action is non-final. | |
| 3)□ | Since this application is in condition for allow closed in accordance with the practice under | | |
| Dispositi | on of Claims | | |
| 4)🖂 | Claim(s) 1 and 129-138 is/are pending in the | application. | |
| | 4a) Of the above claim(s) is/are withdra | wn from consideration. | |
| 5) | Claim(s) is/are allowed. | | |
| 6)⊠ | Claim(s) 1 and 129-138 is/are rejected. | | |
| 7) | Claim(s) is/are objected to. | | |
| 8)□ | Claim(s) are subject to restriction and/o | or election requirement. | |
| Applicati | on Papers | | |
| 9)[| The specification is objected to by the Examine | er. | |
| 10)🖾 ¯ | The drawing(s) filed on <u>14 June 2004</u> is/are: a |)⊠ accepted or b)⊡ objected to b | by the Examiner. |
| | Applicant may not request that any objection to the | ne drawing(s) be held in abeyance. | See 37 CFR 1.85(a). |
| 11) | The proposed drawing correction filed on | _ is: a)□ approved b)□ disap | proved by the Examiner. |
| | If approved, corrected drawings are required in re | • | |
| 12)[_] - | The oath or declaration is objected to by the Ex | kaminer. | |
| Priority u | inder 35 U.S.C. §§ 119 and 120 | • | |
| 13)[_] | Acknowledgment is made of a claim for foreig | n priority under 35 U.S.C. § 11 | 9(a)-(d) or (f). |
| a)[| ☐ All b)☐ Some * c)☐ None of: | | |
| | 1. Certified copies of the priority documen | ts have been received. | |
| | 2. Certified copies of the priority documents have been received in Application No | | |
| | 3. Copies of the certified copies of the price application from the International Buse the attached detailed Office action for a list | reau (PCT Rule 17.2(a)). | _ |
| _ | cknowledgment is made of a claim for domest | | |
| a | The translation of the foreign language processor is made of a claim for domes | ovisional application has been i | received. |
| Attachment | (s) | | |
| 2) 🔲 Notice | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>(</u> | 5) Notice of Inform | nary (PTO-413) Paper No(s) nal Patent Application (PTO-152) |
| | ademark Office | | |

Art Unit: 1711

Claim Rejections - 35 USC § 102/103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 129-138 are rejected under 35 U.S.C. 102(e) as being anticipated by Soon-Shiong et al (5,700,848 or 5,705,270 or 5,846,530). See the Abstract and Examples 16-18 in US '848. Soon-Shiong teaches that the disclosed macrocapsules may contain cells that are encapsulated within microcapsules (column 9, lines 22-24, Example 26). With respect to claim 130, Soon-Shiong teaches poly(ethylene glycol), poly(amino acids), polysaccharides and proteins. Coextrusion is taught in Examples 16, 20 and 26. An accelerator to increase the rate of polymerization is taught in column 7, lines 37-49. With respect to claim 131, Soon-Shiong et al do not teach PEG tetraacrylate. However, the claim, as written, does not limit the macromer to being PEG tetraacrylate, it merely states that the PEG in the Markush group is PEG tetraacrylate.

Claims 1, 129-135 and 137-138 are rejected under 35 U.S.C. 102(e) as being anticipated by Soon-Shiong et al (5,545,423 or 5,759,578 or 5,788,988 or 5,879,709). See the Abstract, column 7, line 43, to column 8, line 14, column 8, line 37, to column 9, line 14, column 11, line 64, to column 12, line 32, and Examples 5, 6 and 7 in US '423. Soon-Shiong teaches a method of microencapsulating cells such as islets and then encapsulating the microspheres in macrocapsules. With respect to claim 130, Soon-Shiong teaches polymerizable alginate, water-soluble poly(alkylene glycol), poly(amino acids), polysaccharides and proteins. An accelerator to increase the rate of polymerization is taught in column 10, lines 36-48. With respect to claim 131, Soon-Shiong et al do not teach PEG tetraacrylate. However, the claim, as

Art Unit: 1711

written, does not limit the macromer to being PEG tetraacrylate, it merely states that the PEG in the Markush group is PEG tetraacrylate. With respect to claim 132 or 133, the claims, as written, do not limit the method of claim 3 to selection of polysaccharides or proteins from the Markush group set forth.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 129-138 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-69 of U.S. Patent No. 5,529,914. Although the conflicting claims are not identical, they are not patentably distinct from each other because the biological cells recited in the claims of US '914 include islet cells (see claim 20) and cells first encapsulated in microcapsules (see claim 2).

Claims 1 and 129-138 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-58 of U.S. Patent No. 6,258,870. Although the conflicting claims are not identical, they are not patentably distinct from each other because the biological cells recited in the claims of US '914 include islet cells (see claim 15) and cells first encapsulated in microcapsules (see claim 50).

Claims 1 and 129-138 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 5,858,746. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US '746 recite the same steps for encapsulating mammalian cells using initiation by light. See claims 1, 16, 18 and 31.

Claims 1 and 129-138 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 5,801,033. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of US '033 recite the same steps for encapsulating mammalian cells as set forth in the instant claims. See claims 1, 2, 11 and 12.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W. Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan W Berman Primary Examiner Art Unit 1711

SB 6/25/05